

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A lead assembly comprising:
a lead body extending from a distal end to a proximal end;
a conductor disposed within the lead body;
a piston movably disposed within the lead body; ~~and~~
a fixation helix supported by the piston at a first portion of the fixation helix, the first portion of the fixation helix supported by the piston forming a drive mechanism that advances the fixation helix; and
a housing portion disposed near the distal end of the lead body, the housing portion including a guide adapted to guide the drive mechanism disposed on an inner surface thereof.
2. (Original) The lead assembly as recited in claim 1, wherein the first portion of the fixation helix is coupled with the piston.
3. (Currently Amended) The lead assembly as recited in claim 1, wherein the piston has a recess wrapped around an outer surface thereof such that one or more portions of the recess are separated from one another by a non-recessed portion, and at least a portion of the first portion of the fixation helix is disposed within the recess.
4. (Original) The lead assembly as recited in claim 3, wherein the recess has a helical shape.
5. (Original) The lead assembly as recited in claim 3, wherein the recess has a first width and the first width is less than a diameter of the first portion of the fixation helix.
6. (Original) The lead assembly as recited in claim 3, wherein approximately 1/3 to 1/2 of a diameter of the fixation helix is disposed within the recess.
7. (Canceled)

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8. (Currently Amended) A lead assembly comprising:
- a lead body extending from a distal end to a proximal end;
 - a housing disposed near the distal end of the lead body;
 - a conductor disposed within the lead body;
 - a piston movably disposed within the housing;
 - a fixation helix coupled with the piston along a first longitudinal portion of the fixation helix, the first portion of the fixation helix coupled with the piston forming a drive mechanism that advances the fixation helix; and
 - a guide disposed within an inner surface of the housing.
9. (Original) The lead assembly as recited in claim 8, wherein the guide is a helical guide.
10. (Currently Amended) The lead assembly as recited in claim 8 9, wherein the helical guide is a segmented helical guide.
11. (Currently Amended) The lead assembly as recited in claim 8, wherein the fixation helix is coupled with the piston along a recess ~~within~~ extending inward from an outer surface of the piston, a first portion of the recess separated from a second portion of the recess by a non-recessed piston portion.
12. (Original) The lead assembly as recited in claim 8, wherein the fixation helix has an inner diameter and the piston has an outer diameter, and the outer diameter is greater than the inner diameter prior to coupling the fixation helix with the piston.
13. (Original) The lead assembly as recited in claim 8, wherein the fixation helix is coupled with the piston along a helical recess within the piston.
14. (Original) The lead assembly as recited in claim 8, wherein the fixation helix is electrically coupled with the conductor.

15. (Currently Amended) A lead assembly comprising:

- a conductor;
- a piston electrically coupled with the conductor; ~~and~~
- an active fixation helix supported by the piston at a first portion of the fixation helix, the first portion of the fixation helix supported by the piston forming a drive mechanism that longitudinally advances and retracts the fixation helix; and
- a housing including a guide therein, the guide extending from an inner surface of the housing and adapted to interact with the first portion of the fixation helix.

16. (Original) The lead assembly as recited in claim 15, wherein the active fixation helix is electrically coupled with the piston.

17. (Original) The lead assembly as recited in claim 15, wherein the active fixation helix is recessed within a portion of the piston.

18. (Currently Amended) The lead assembly as recited in claim 15, wherein the active fixation helix is mechanically coupled with the piston via one or more recessed groove portions separated by a non-recessed piston portion.

19. (Currently Amended) A method comprising:

- providing a lead assembly including:
 - a lead body extending from a distal end to a proximal end;
 - a conductor disposed within the lead body;
 - a piston movably disposed within the lead body;
 - a fixation helix supported by the piston at a first portion of the fixation helix supported by the piston, the first portion of the fixation helix forming a drive mechanism;
 - a housing including a guide extending from an inner surface thereof;
- rotating the fixation helix; and
- longitudinally driving the fixation helix with the drive mechanism, including moving portions of the fixation helix along the guide.

20. (Currently Amended) The method as recited in claim 19, further comprising recessing at least a part of the first portion of the fixation helix within the piston such that a non-recessed portion of the piston separates successive turns of the fixation helix.

21. (Currently Amended) The method as recited in claim 19, further comprising recessing approximately 1/3 to 1/2 of a diameter of the fixation helix within the piston such that successive turns of the fixation helix are separated by a non-recessed piston portion.

22. (Original) The method as recited in claim 19, further comprising recessing at least a part of the first portion of the fixation helix within a helical groove of the piston.

23. (Original) The method as recited in claim 19, further comprising coupling the first portion of the fixation helix with the piston.

24. (New) The lead assembly as recited in claim 1, wherein the housing portion comprises a molded component.

25. (New) The lead assembly as recited in claim 8, further comprising a stop adapted to prevent over extension of the fixation helix from the lead body, the stop disposed around a portion of the piston.

26. (New) The lead assembly as recited in claim 15, further comprising a fluoromarker coupled with a portion of the housing.